

WHAT IS CLAIMED IS:

1. A switching regulator comprising:
 - a first terminal for inputting an output voltage of the switching regulator;
 - a reference voltage source for generating a reference voltage;
 - a voltage divider circuit for dividing the output voltage of the switching regulator;
 - an error amplifier for inputting the reference voltage and an output signal of the voltage divider circuit;
 - a first circuit block having one resistance, for outputting a signal that varies depending on a resistance value of the resistance;
 - a second circuit block having a square wave oscillator, for outputting a signal based on an output signal of the square wave oscillator and an output signal of the first circuit block;
 - a third circuit block having a logic circuit for receiving the output signal of the square wave oscillator and the output signal of the second circuit block to output a signal, and a circuit for outputting an output signal which is controlled based on an output of the logic circuit; and
 - a comparator for receiving an output of the error amplifier and the output signal of the third circuit block to output a signal.